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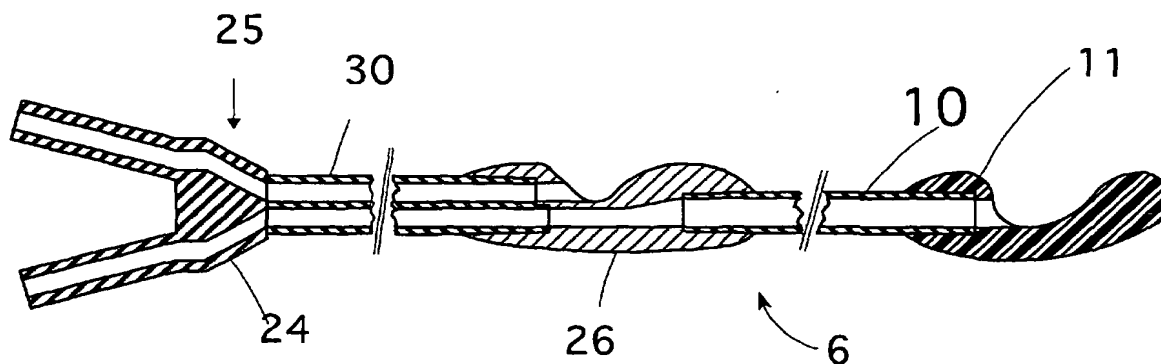
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[Continued on next page]

(54) Title: CATHETER



(57) **Abstract:** An enteral feeding catheter (5) that provides access to both the stomach and the jejunum for feeding, aspiration and decompression. The catheter includes a dual lumen "D" tube (30) that joins to an external "Y" connector (25) at the proximal end of the tube. The connector serves both lumens as a source for fluid or aspiration. The gastric lumen (37) and the jejunal lumen (38) of the "D" tube both connect to a transitional connector bolus in the stomach. The gastric lumen of the "D" tube joins with a lumen in the transitional bolus that communicates with a gastric port (27). The gastric port is recessed to the level of its full internal lumen, thereby providing maximum protection against occlusion and maximum area for outflow. The "D" jejunal lumen connects in the bolus with a lumen that transitions from a "D" shape to a full circle shape. The latter provides for the attachment of a smaller, round, single lumen tube that extends into the jejunum. At the distal end of the jejunal tube is a bolus (11) containing an improved port that is also recessed to the level of the floor of the internal tube lumen to provide maximum protection against occlusion and maximum area for outflow. Both the gastric port in the transitional bolus and the jejunal port in the tip bolus may include a structural arch protruding radially outwardly therefrom. An arch is effective to prevent the body segment of either bolus from bending and restricting the ports. The invention also provides for the insertion of the tube over a guidewire (21) rather than with an internal stylet, as is normally the case with nasally inserted tubes.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

AMENDED CLAIMS

[received by the International Bureau on 25 May 2004 (25.05.04);
new claims 21-23 added; remaining claims unchanged (2 pages)]

configuration, with said septum being thinner in the portion of said tube which is stepped;

c) a bolus having a septum therein dividing one end of said bolus into an upper passage and a lower passage;

d) said septum in said bolus overlapping said thinner portion of said septum in said catheter tube when said distal end of said tube is sealed in said bolus.

21. A catheter, comprising:

(a) a catheter tube having a generally cylindrical outer wall and containing a septum that divides the tube between a generally D-shaped first lumen and a generally D-shaped second lumen, said tube having a proximal end and a distal end;

(b) said second lumen extending to an opening at said distal end of said tube;

(c) said first lumen extending to an opening at a predetermined distance from said distal end of said tube, said septum forming a portion of the outer wall of said tube between said first lumen opening and said second lumen opening; and

(d) a bolus tip on the distal end of said tube, said bolus tip including an attachment section fastened to said septum where it comprises an outer wall and having a rear face defining a ramp including a surface inclined at an angle to said septum;

(e) said ramp extending rearwardly to an intersection with said lumen;

(f) said bolus forming at least a portion of a first port in the side of said catheter communicating with said first lumen opening; and

(g) said bolus forming at least a portion of a second port in said catheter communicating with said second lumen opening.

22. A catheter, comprising:

- a) a catheter tube formed of resilient plastic, said tube having a distal end and containing a first lumen and a second lumen separated by a septum;**
- b) said distal end of said tube being formed so that said second lumen and said septum extend beyond said first lumen for a predetermined distance whereby said septum forms a substantially flat outer wall of said tube for said predetermined distance;**
- c) a bolus molded of resilient plastic and connected to said distal end of said tube, said bolus forming at least a portion of each of a first port extending radially of said catheter and communicating with said first lumen and a second port communicating with said second lumen;**
- d) said septum, where it forms said outer wall of said tube, underlying at least a portion of said first port.**

23. The catheter of Claim 22 further characterized in that:

- a) said catheter tube including a generally cylindrical wall containing said lumens, a portion of said cylindrical wall adjacent said distal end of said catheter being removed to expose said septum and create said substantially flat outer wall.**

STATEMENT UNDER ARTICLE 19 (1)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
PCT RECEIVING OFFICE

In re Application of:)
Radius International Limited)
Partnership)
)
International Application)
No. PCT/US03/36297)
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For: CATHETER)

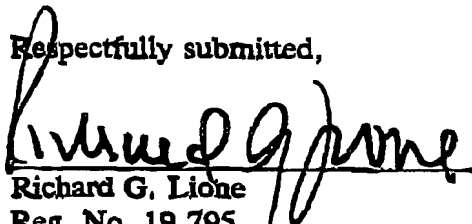
STATEMENT REGARDING NEW CLAIMS 21-23
AND THEIR SUPPORT IN THE DISCLOSURE

World Intellectual Property Organization
PCT Division
34, chemin des Colombettes
CH-1211 Geneva 20
SWITZERLAND

Dear Sirs:

New Claims 21-23 are added to completely cover the invention illustrated in FIGS. 38-48 of the application. Those figures and corresponding specification description fully support the new claims. No new matter is incorporated.

Respectfully submitted,


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Date:

May 21, 2004

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